



Drought impacts monitoring in Slovakia

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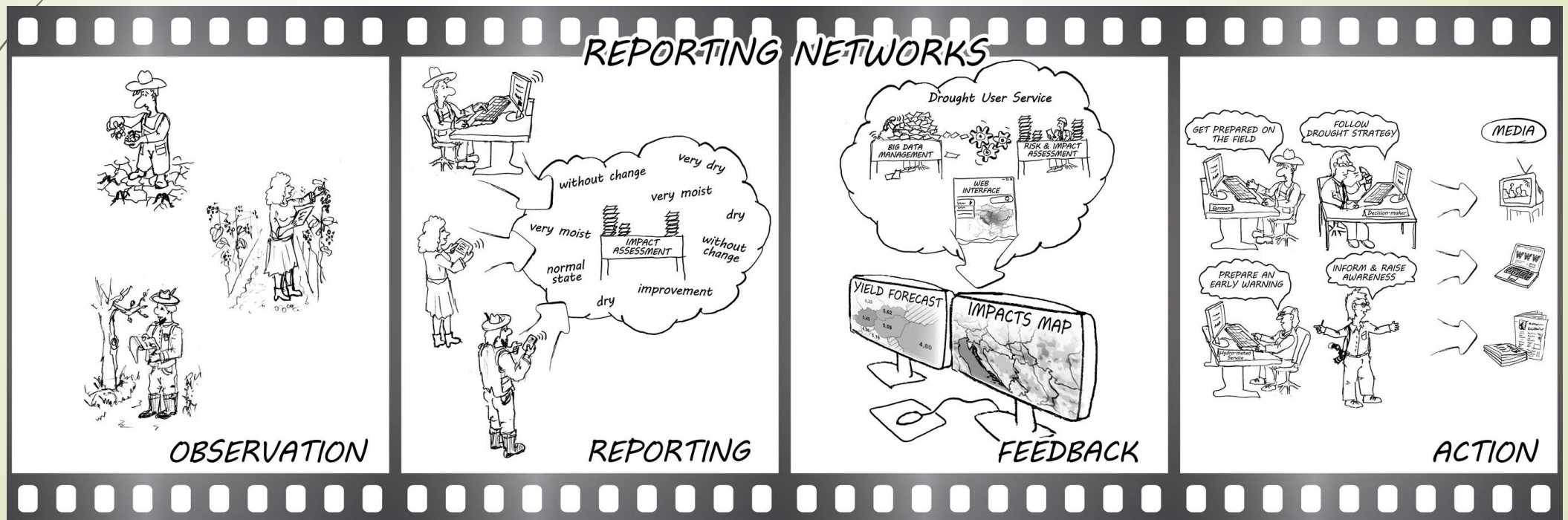


Drought monitoring

- ▶ Meteorological drought – weekly since 2015
 - ▶ https://www.shmu.sk/sk/?page=1&id=meteo_sucho
- ▶ Soil drought – weekly since 2015 (SHMI – the member of Intersucho platform)
 - ▶ <https://www.intersucho.sk>
- ▶ Hydrological drought – daily since 2017
 - ▶ https://www.shmu.sk/sk/?page=1&id=hydro_sucho
- ▶ Drought in underground water – daily since 2017
 - ▶ https://www.shmu.sk/sk/?page=1&id=pzv_kvantita

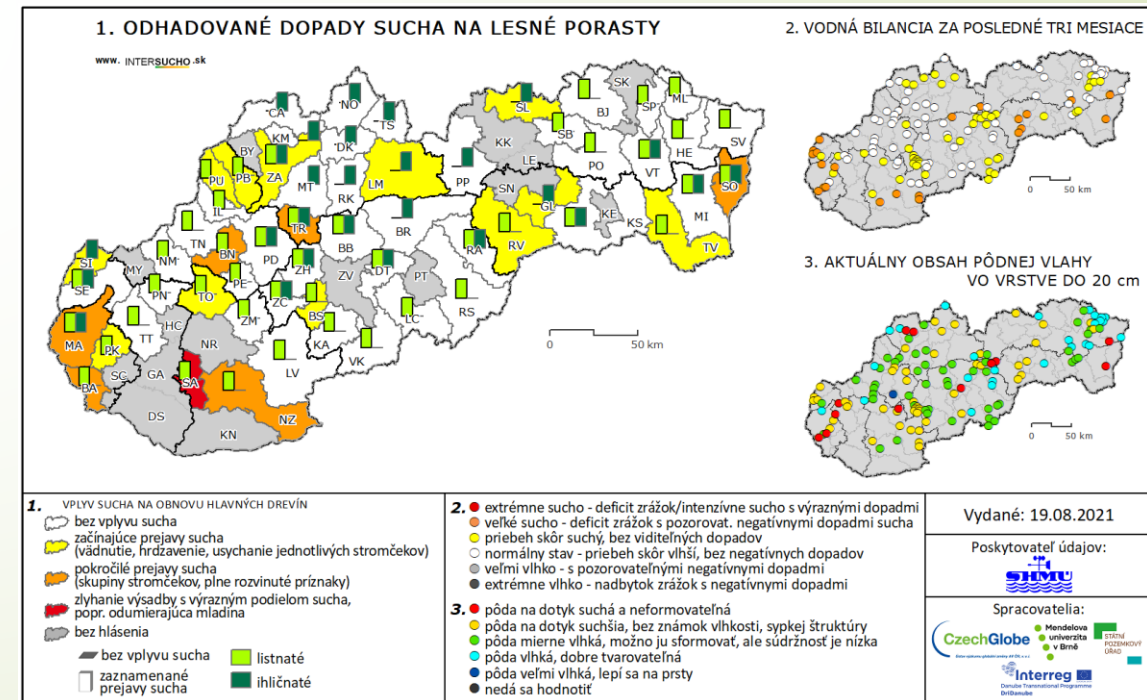
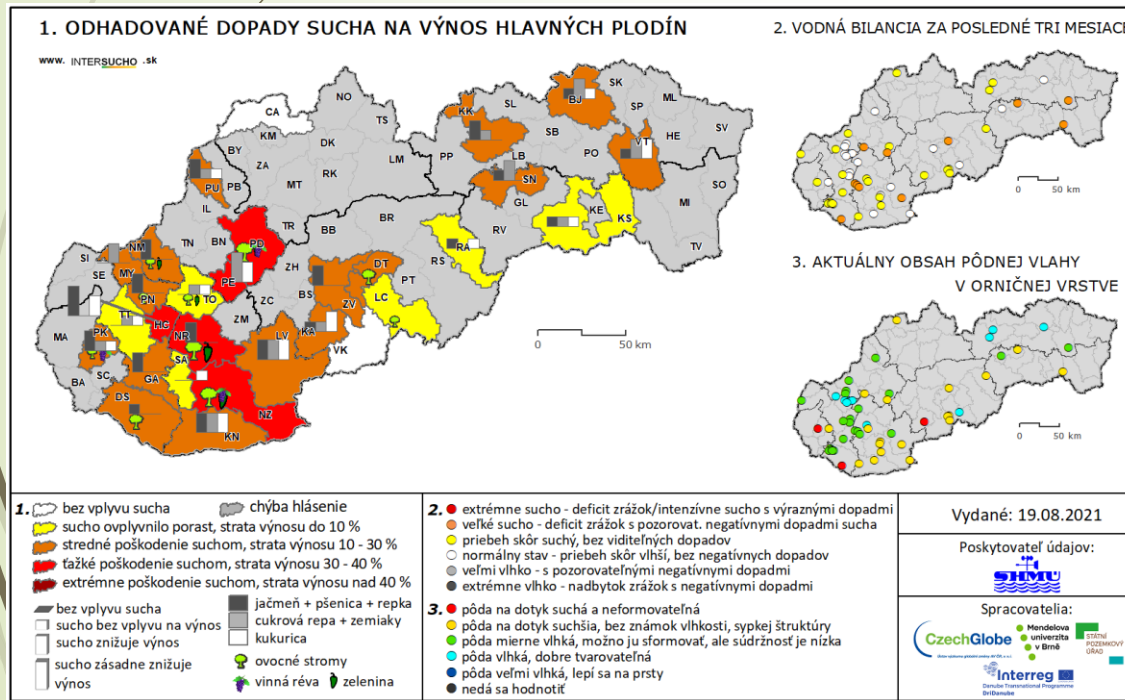
Drought impacts monitoring

- Intersucho + DriDanube project (Interreg DTP) → **National reporting network**
- **voluntary reporting** in sense of loans/subventions
 - increases the sustainability of the reporting network
 - farmers, fruiterers and foresters – expert assessment on weekly basis
 - bonus forecasts for chosen area

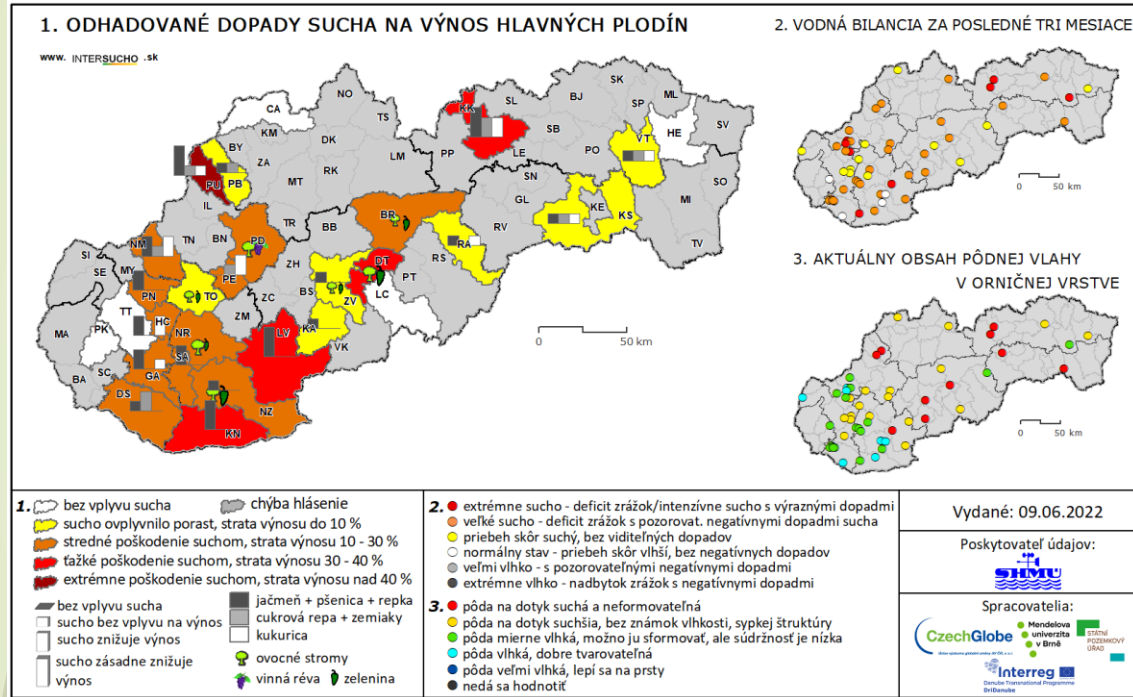


Drought impact maps

- weekly basis
- in the form of questionnaire with the ability to insert **comments and photos**
- map of the drought impacts on **agriculture**
- map of the drought impacts on **forestry**



Drought impacts – spring 2022





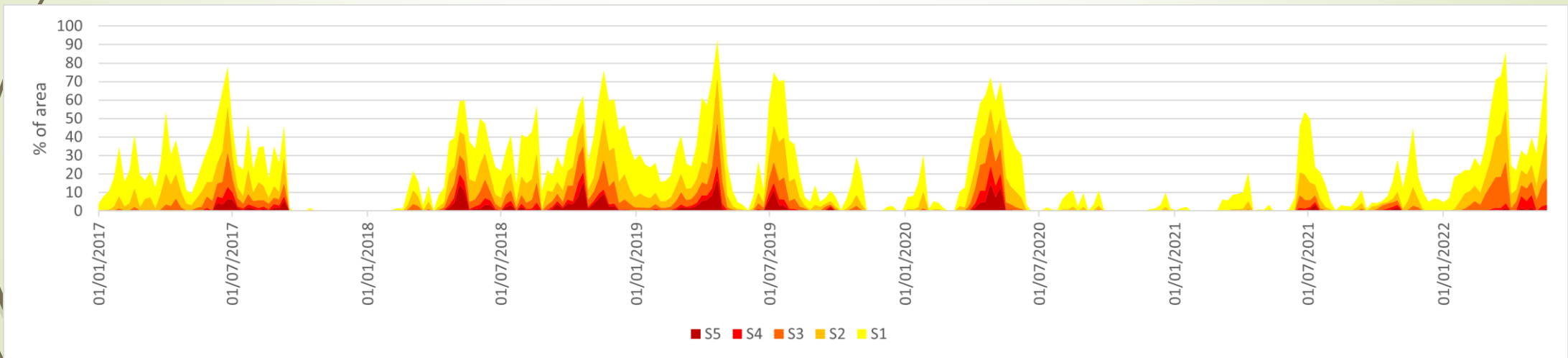
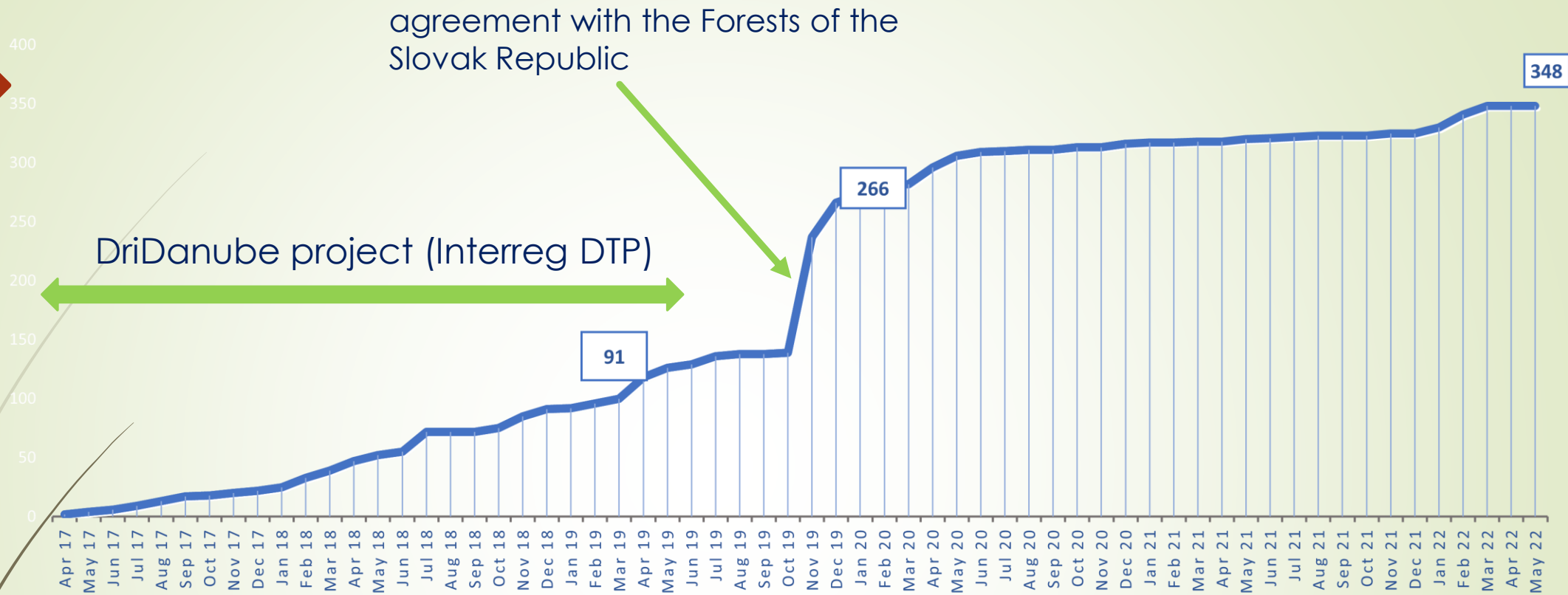
Growth of the network

- ▶ **lively co-operation and support** by:

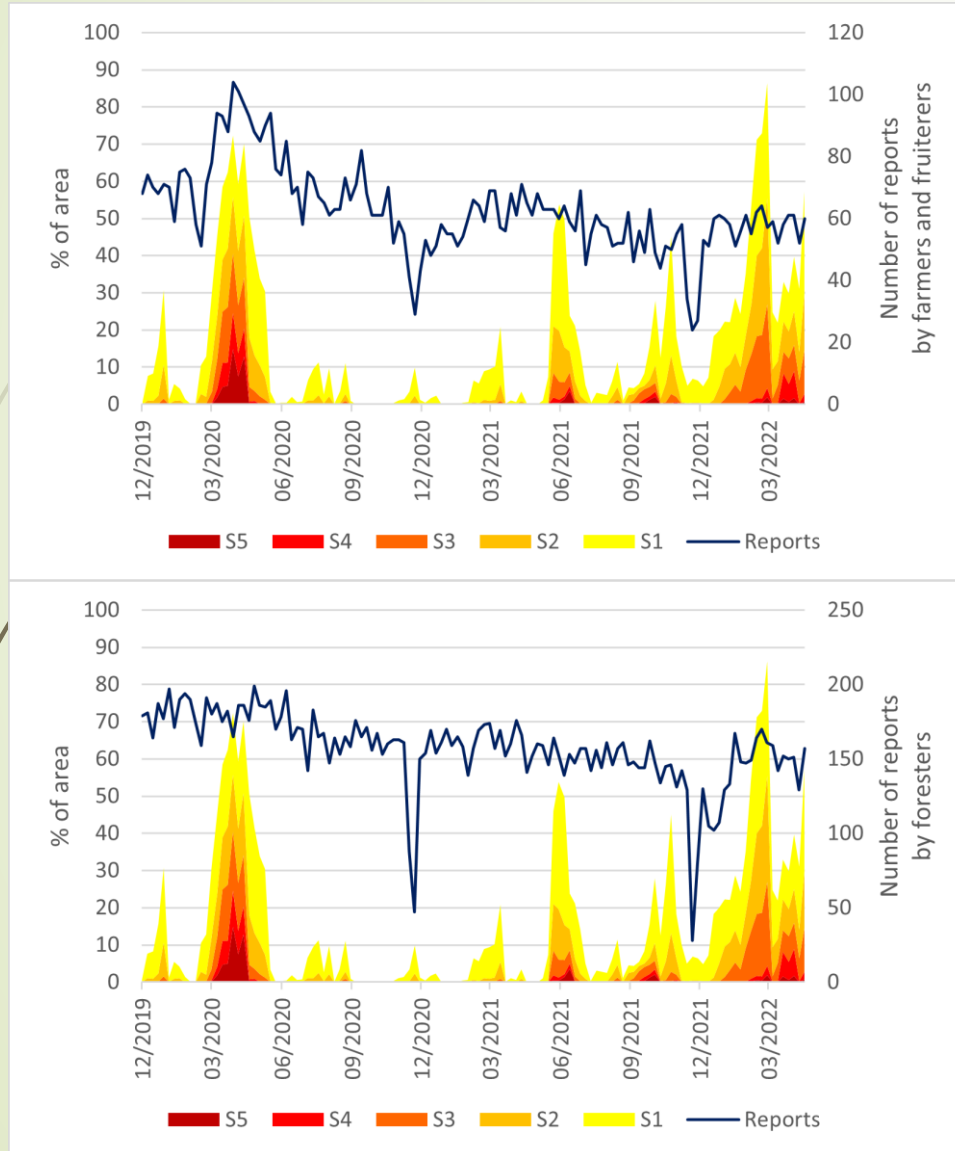
- ▶ Slovak Agriculture and Food Chamber
- ▶ Ministry of Agriculture and Rural Development
- ▶ Forests of the Slovak Republic, state enterprise
- ▶ own promotion activities

- ▶ **what worked:**

- ▶ attendance and presentations at several seminars and meetings organized by Agricultural Chamber at regional level
- ▶ we prepared two flyers about drought monitoring and reporting
- ▶ promotion of the network at SHMI's official webpage and FB account -> media
- ▶ information and assessments about drought occurrence and drought impacts in media
- ▶ reports for the Ministry of Agriculture and Rural Development after drought events



Oscillation of weekly reports



➤ positive impacts

- drought
- Annual meeting with reporters including the awarding of the most active reporters
- personal meetings on seminars

➤ negative impacts

- pandemic situation

➤ positive impacts

- agreement with the Forests of the Slovak Republic
- Annual meeting with reporters

➤ negative impacts

- pandemic situation
- re-organisation of the state enterprise

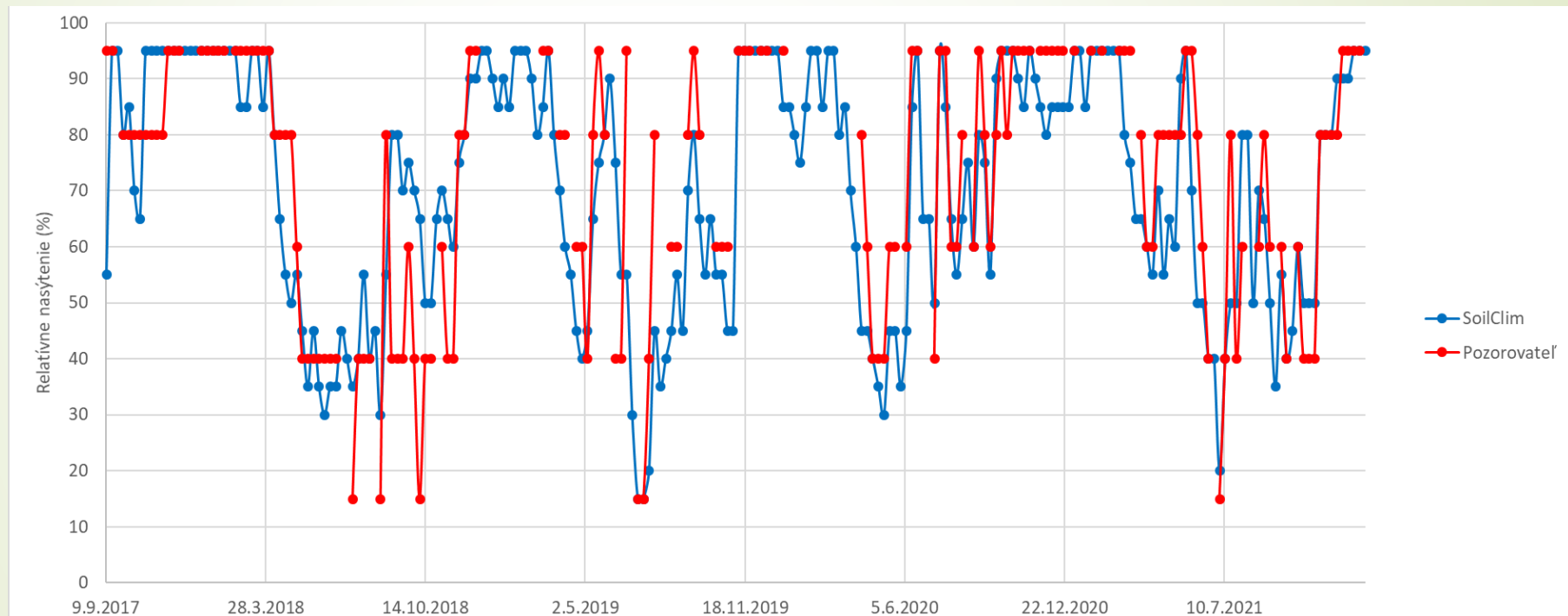


Future of the network

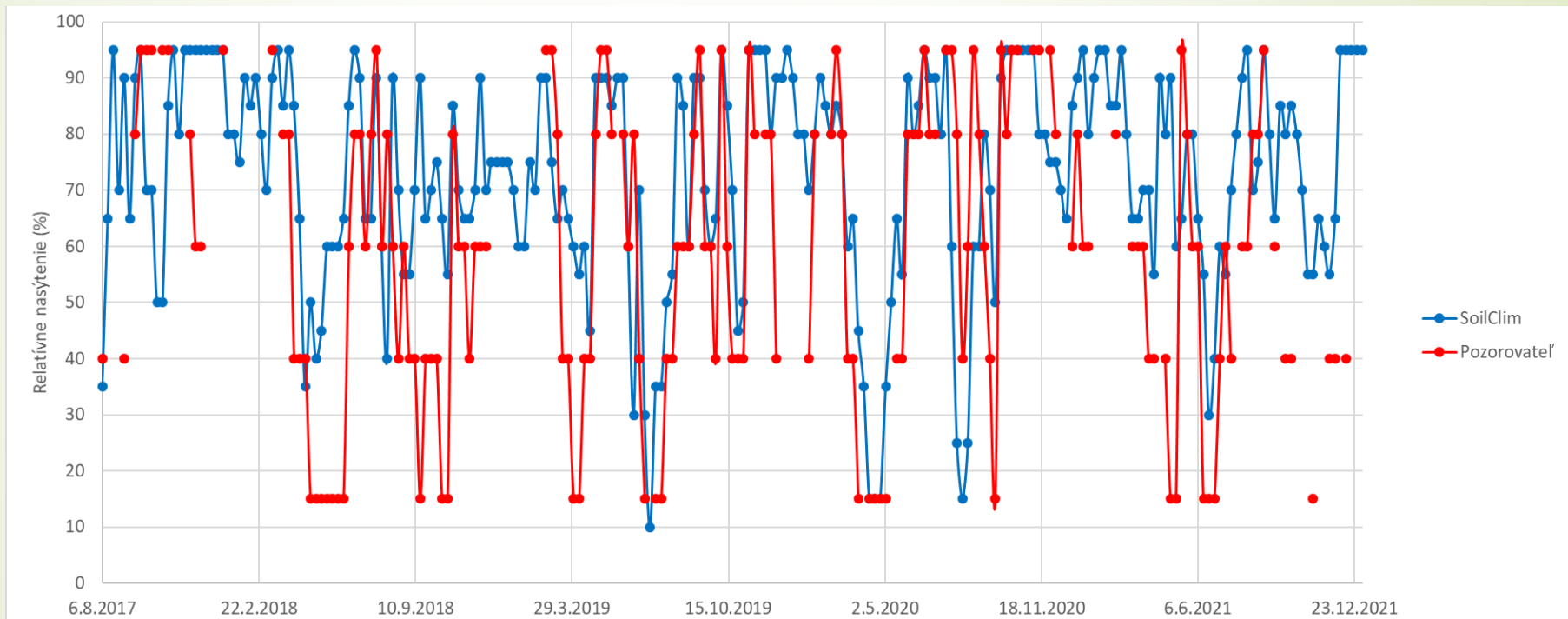
- ▶ Our vision:
 - ▶ to have **at least one observer in every district** (maps without gray districts)
 - ▶ to **increase the number of the observers** in already monitored districts
- ▶ How to reach it?
 - ▶ more intensive communication and co-operation with the Slovak Agricultural and Food Chamber
 - ▶ optimising the benefits for observers
 - ▶ revival of Annual meetings with observers

SoilClim model vs. observers

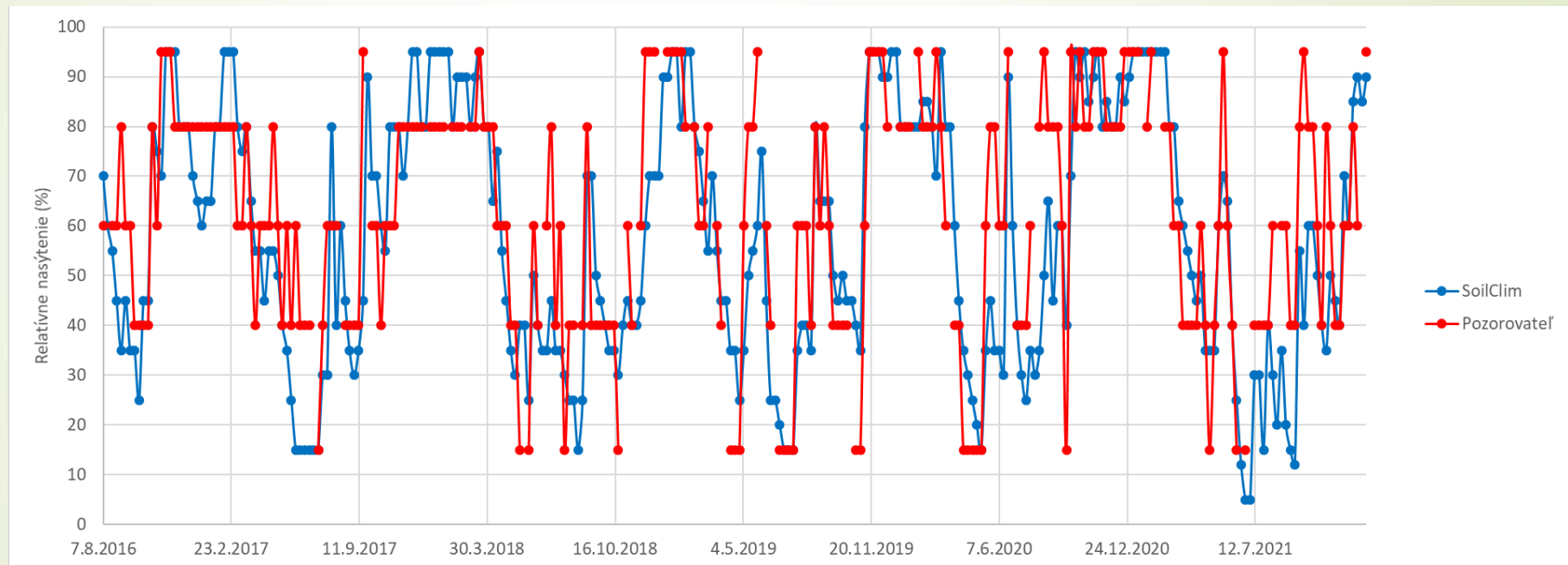
- the comparison of **relative soil humidity (%)** in upper soil layer (0 - 20cm) calculated by SoilClim and the **assessment of the observer**



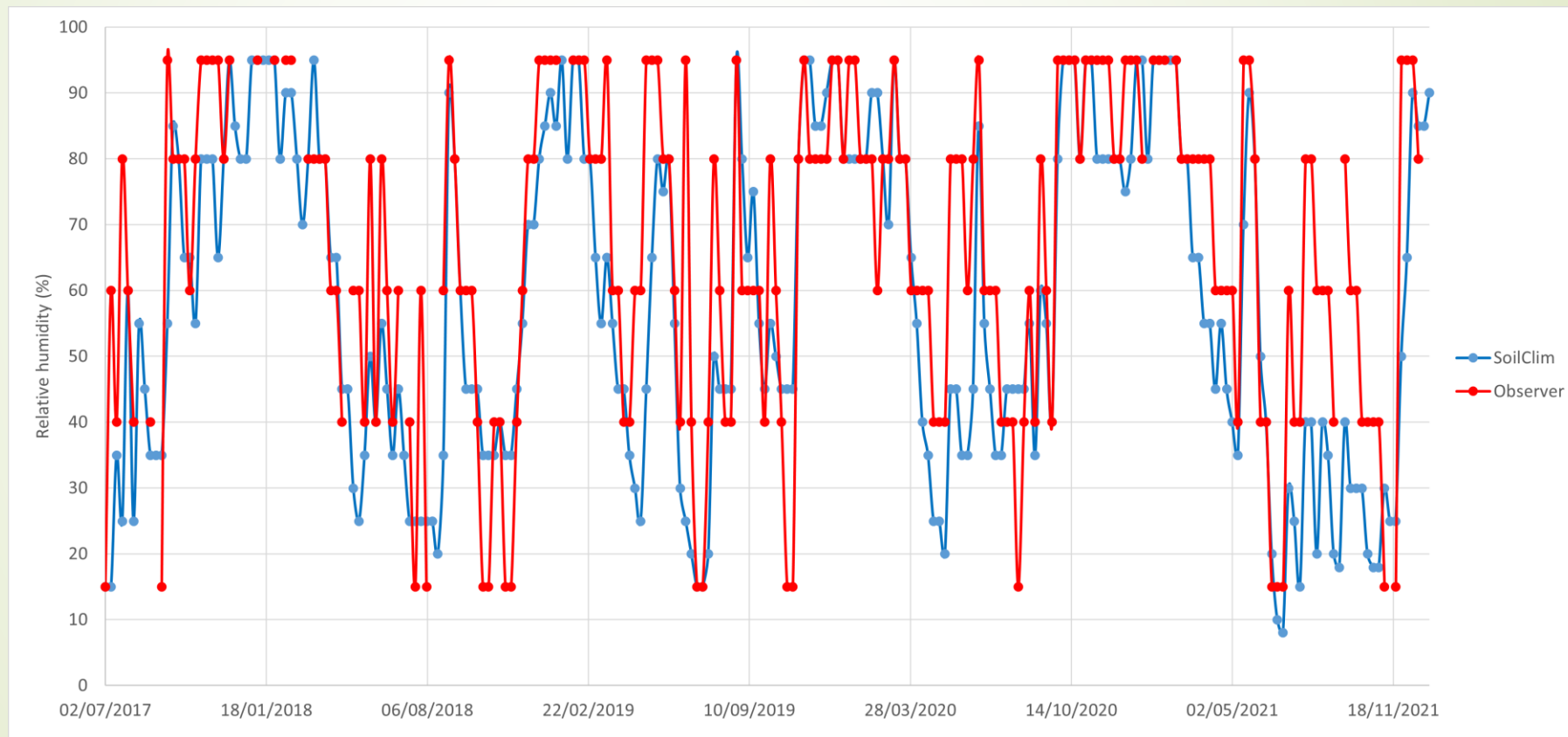
Zvolen district (the central part of Slovakia)



district Kežmarok (the northeastern part of Slovakia)



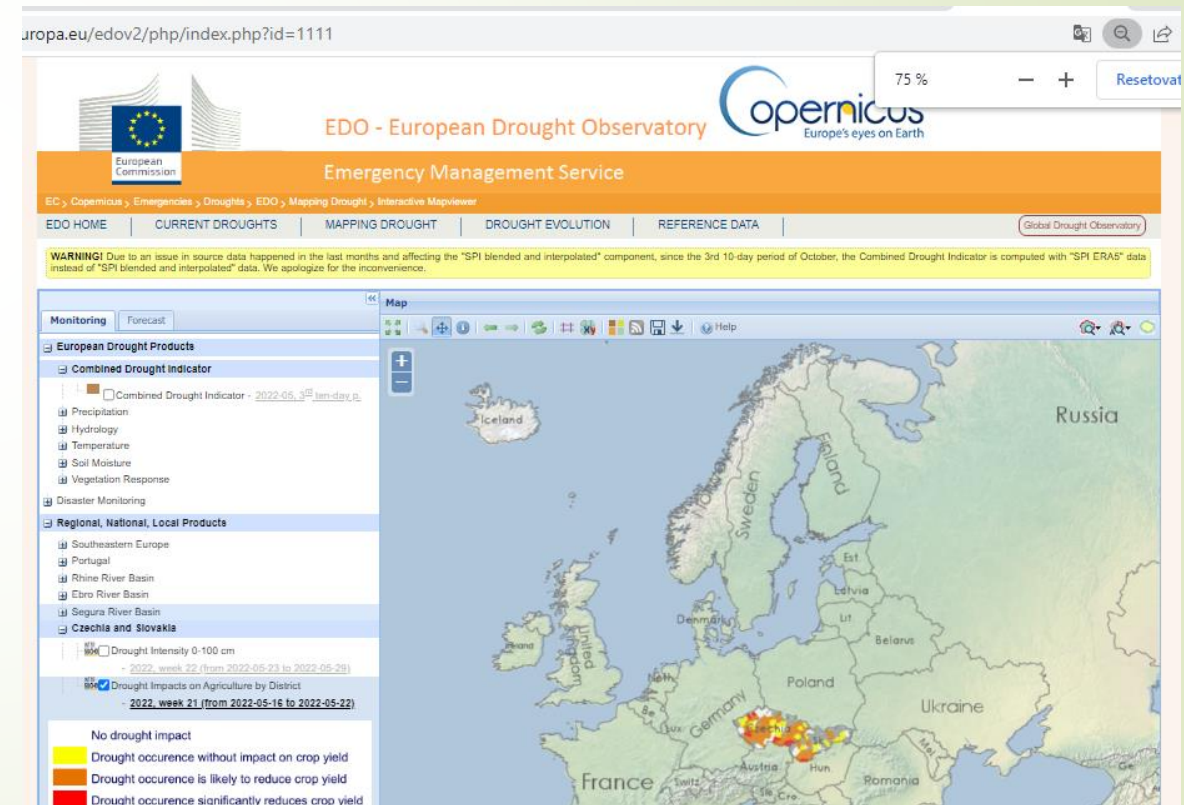
district Senec (the southwestern part of Slovakia)



district Trnava (the southwestern part of Slovakia)

More information

- https://www.shmu.sk/sk/?page=1&id=monitoring_sucha
- www.intersucho.sk
- Email:
 - sucho_hlasenia@shmu.sk
 - oks@shmu.sk





Thank you for your attention!

Do you have any questions?